

May 18, 1954

Dr. Joshua Lederberg
Department of Genetics
University of Wisconsin
Madison, Wisconsin.

Dear Dr. Lederberg:

I have received your letter of April 28 for which I am most grateful to you. I am also very glad to know that you are interested in our experiments and to have your frank opinions on the subject and likewise for the points you have brought up.

As to your first question, whether we can recover lysogenic bacteria that are invariably altered in their antigenic structure from single plaques, we have not as yet conducted such an experiment. Under the present circumstances, however, we are able to say that organisms capable of forming XV antigenic factor were always lysogenic as far as tested, while it is not clear as yet whether lysogenic organisms are always capable of forming XV antigenic factor.

As to your second question on the 3rd point in my previous letter, what I meant by "replacement of genetic trait" is as follows. In your experiments, in *S. typhi*, for example, genetic trait for formation of d antigenic factor was replaced by another genetic trait, for formation of other antigenic factor such as b etc., while in our experiments there has been no evidence as yet that some other genetic trait was replaced by the genetic trait, if any, for the formation of XV antigenic factor.

It is a great pleasure to know that you intend to repeat our experiments. I will send you our strains of group E₁ and E₂ and available strains of bacteriophage, though the bacterial strains are nothing special but are the standard strains that were sent from F. Kauffmann to Enterobacteriaceae Committee of Japan, the donor.

Finally, I wish to thank you profoundly for your kind advice as to submitting our experimental findings to the Journal of Bacteriology. I would appreciate your recommendation to Dr. Porter, as I am going to send you my paper within a few weeks.

I shall be also looking forward to a continued exchange of information on these topics of such great mutual interest.

Yours sincerely,

Hisao Uetake

Hisao Uetake
Professor
Department of Microbiology